

GIGABYTE GA-8VD667 Schematics

Revision 1.1

SHEET	TITLE
01	COVER SHEET
02	BOM & PCB MODIFY HISTORY
03	SYSTEM BLOCK DIAGRAM
04	P4_478A
05	P4_478B
06	P4_478C
07	GMCH-A(845GV)CPU,DDR INTERFACE U1
08	GMCH-A(845GV)DDR,VGA INTERFACE
09	GMCH-A(845GV)POWER INTERFACE
10	DDR SERIAL TERMINATION
11	DDR1, 2
12	VTT_DDR TERMMINATOR
13	ICH4-1 (HUB,PCI,CNR,AC97,USB) U12
14	ICH4-2
15	FWH (FLASH ROM)
16	CLOCK GENERATOR(ICS950211AF) U13
17	PCI1 & PCI2 SLOT
18	PCI3 SLOT
19	LPC I/O IR(ITE 8712 VER:GX) U14
20	IDE1, 2 CONNECTOR
21	PS/2 KB & MOUSE & F_USB
22	FLOPPY, COM & LPT & WOR & WOL CONNECTOR
23	FAN & H/W MONITOR ,CASE OPEN

SHEET	TITLE
24	FRONT PANEL,LED
25	AC97 CODEC REALTEK ALC650
26	LINE OUT & FRONT AUDIO CONN
27	LINE IN,MIC,CDIN,AUX(CD-IN2) GAME PORT
28	MISC. PWR & ATX POWER (3VDUAL, VDDQ)
29	VCORE PWM(SC243X/SC1205H)
30	DDR POWER (5VDUAL, 2_5VSTR,VTT_DDR)
31	RTL8101L Transformer
32	GPIO PIN LIST
33	PCI ROUNTING

COMPONENT SIDE
(1 oz. Copper)
VCC SIDE
(1 oz. Copper)
GND SIDE
(1 oz. Copper)
SOLDER SIDE
(1 oz. Copper)

GIGABYTE

TitleCOVER SHEET

SizeCustom

Document NumberGA-8VD667

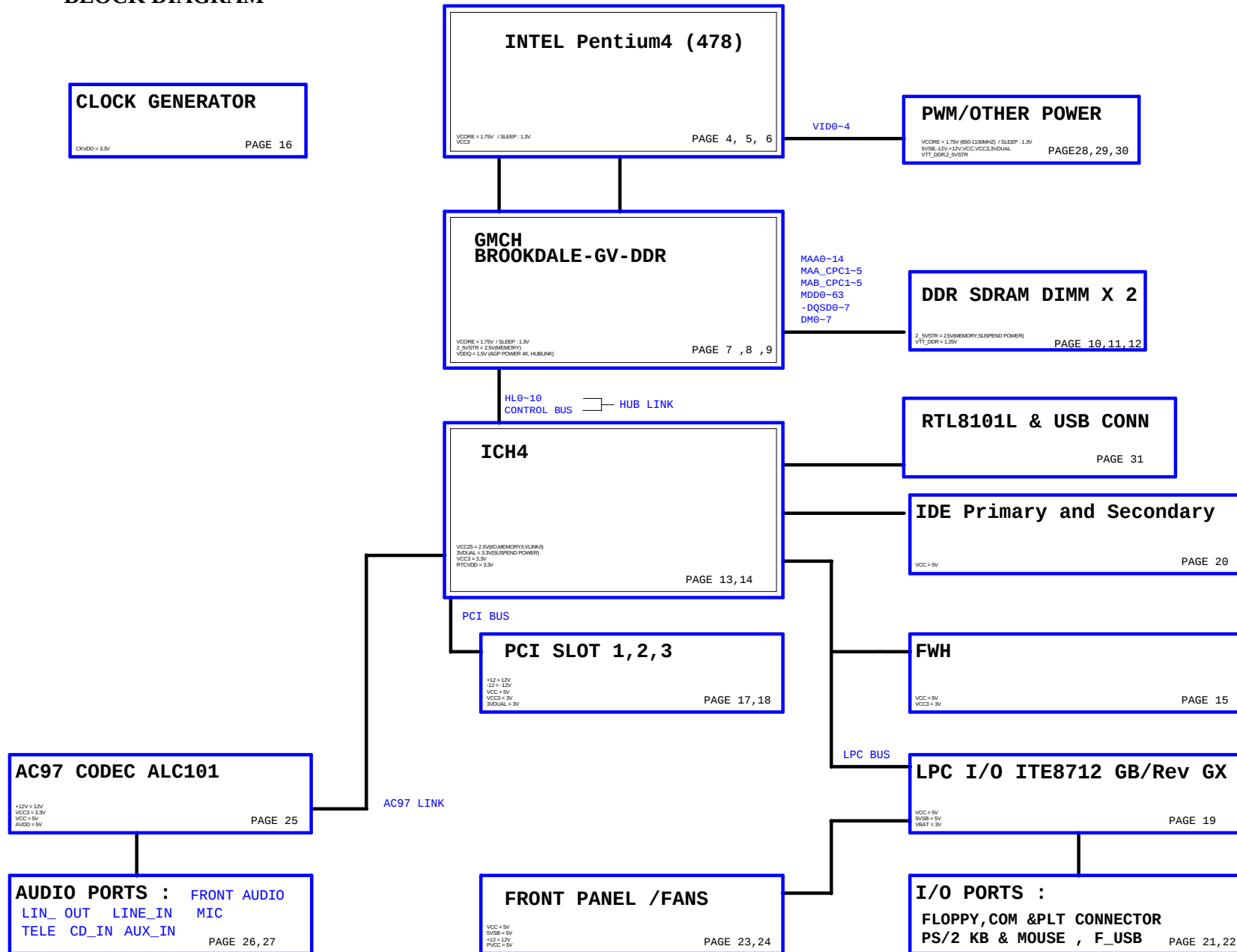
Rev1.1

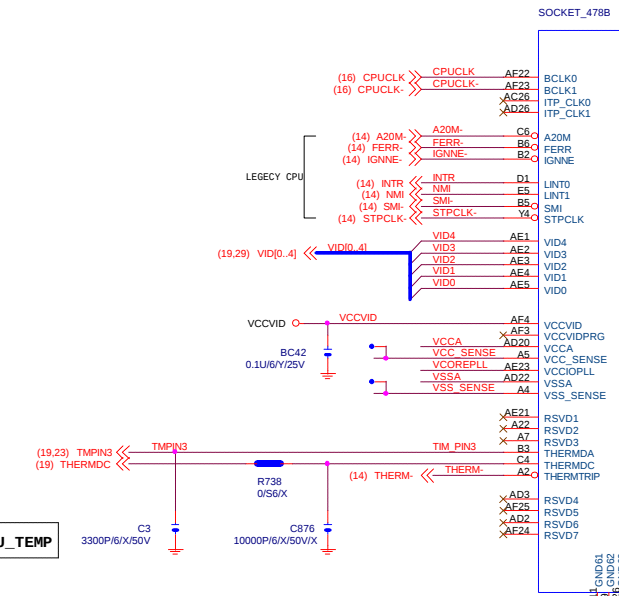
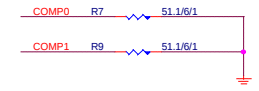
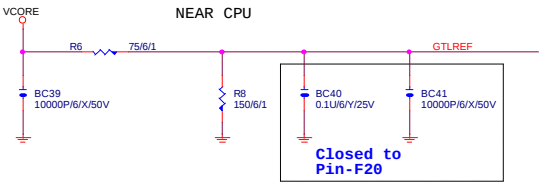
DateFriday, September 19, 2003

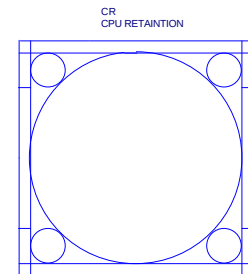
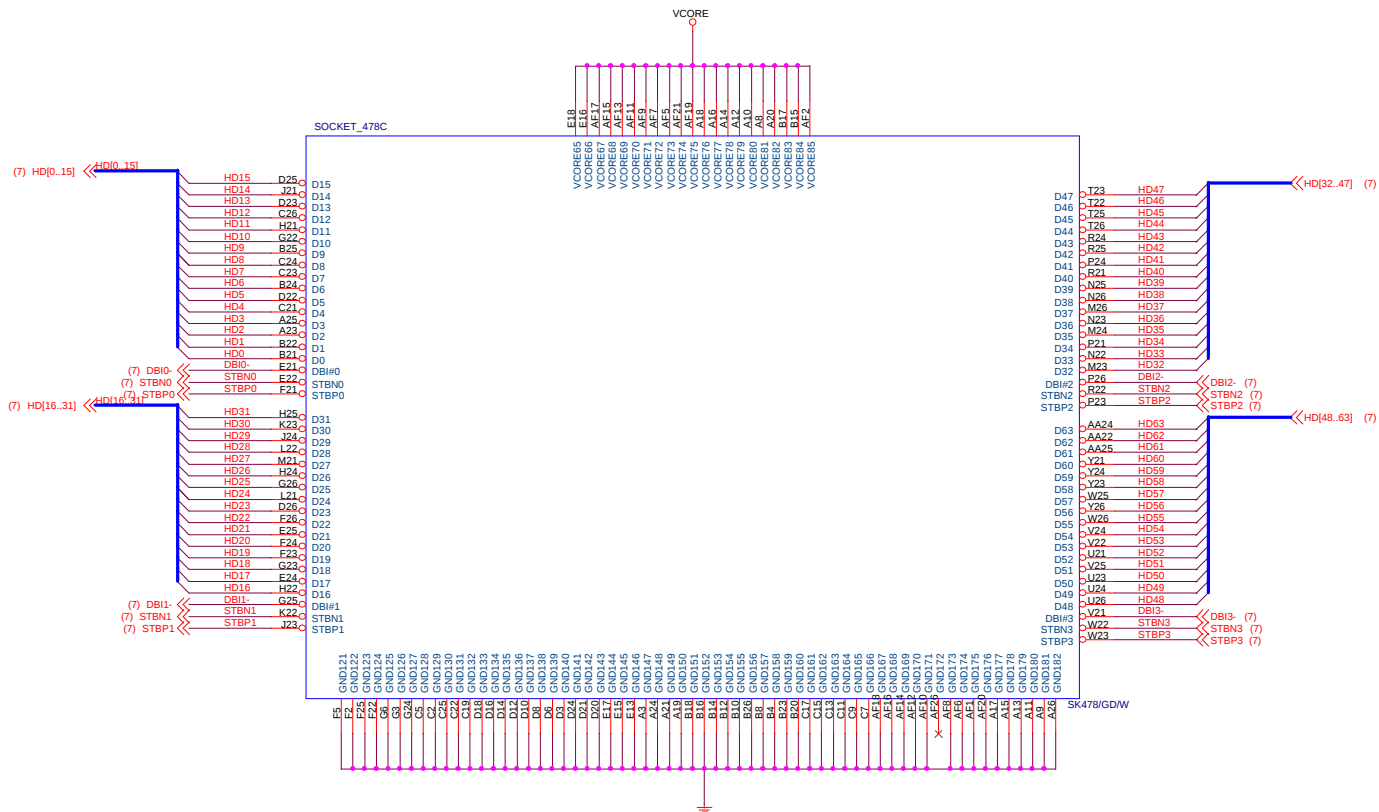
Sheet1 of 33

Component value change history

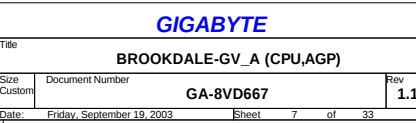
BLOCK DIAGRAM

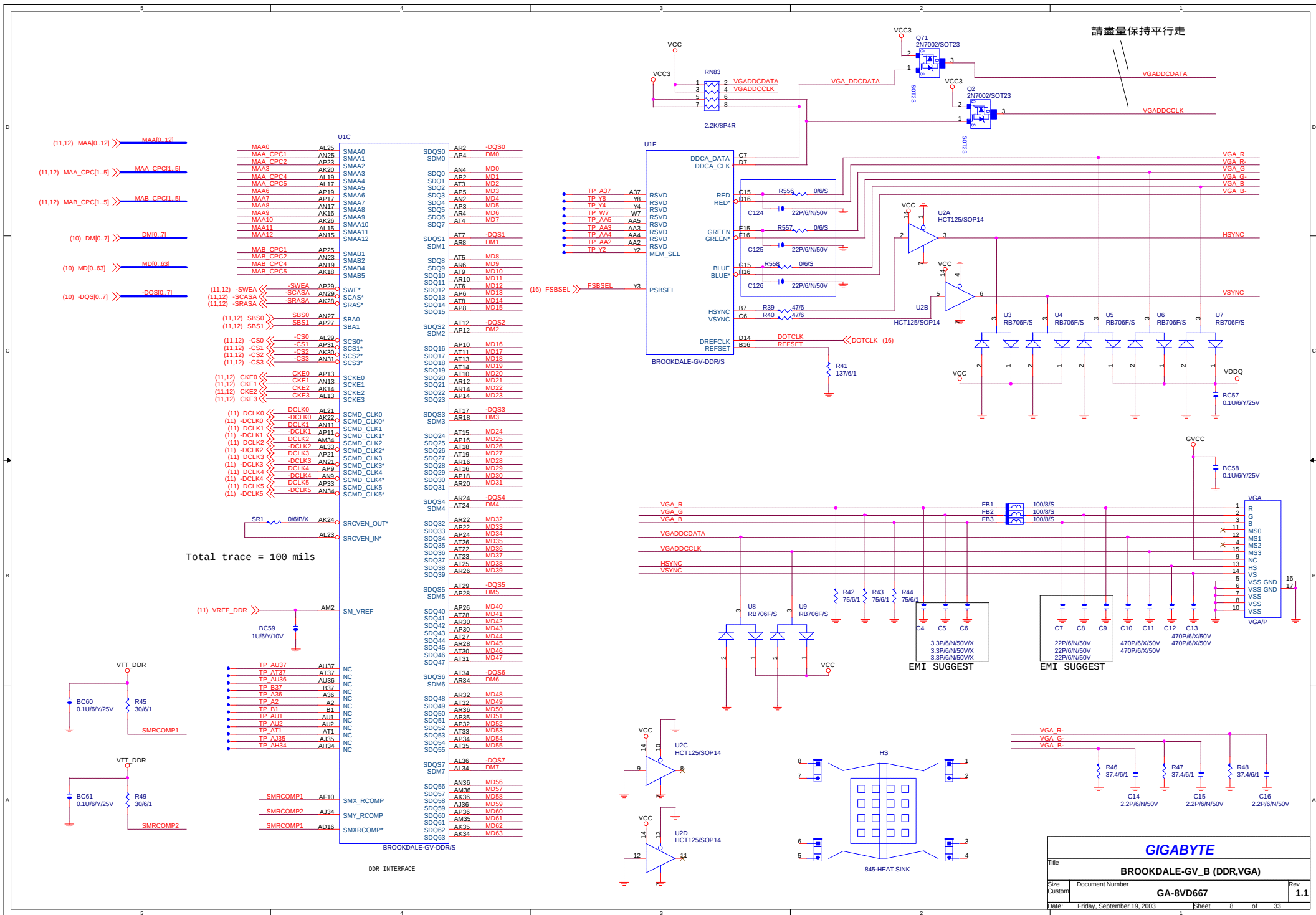




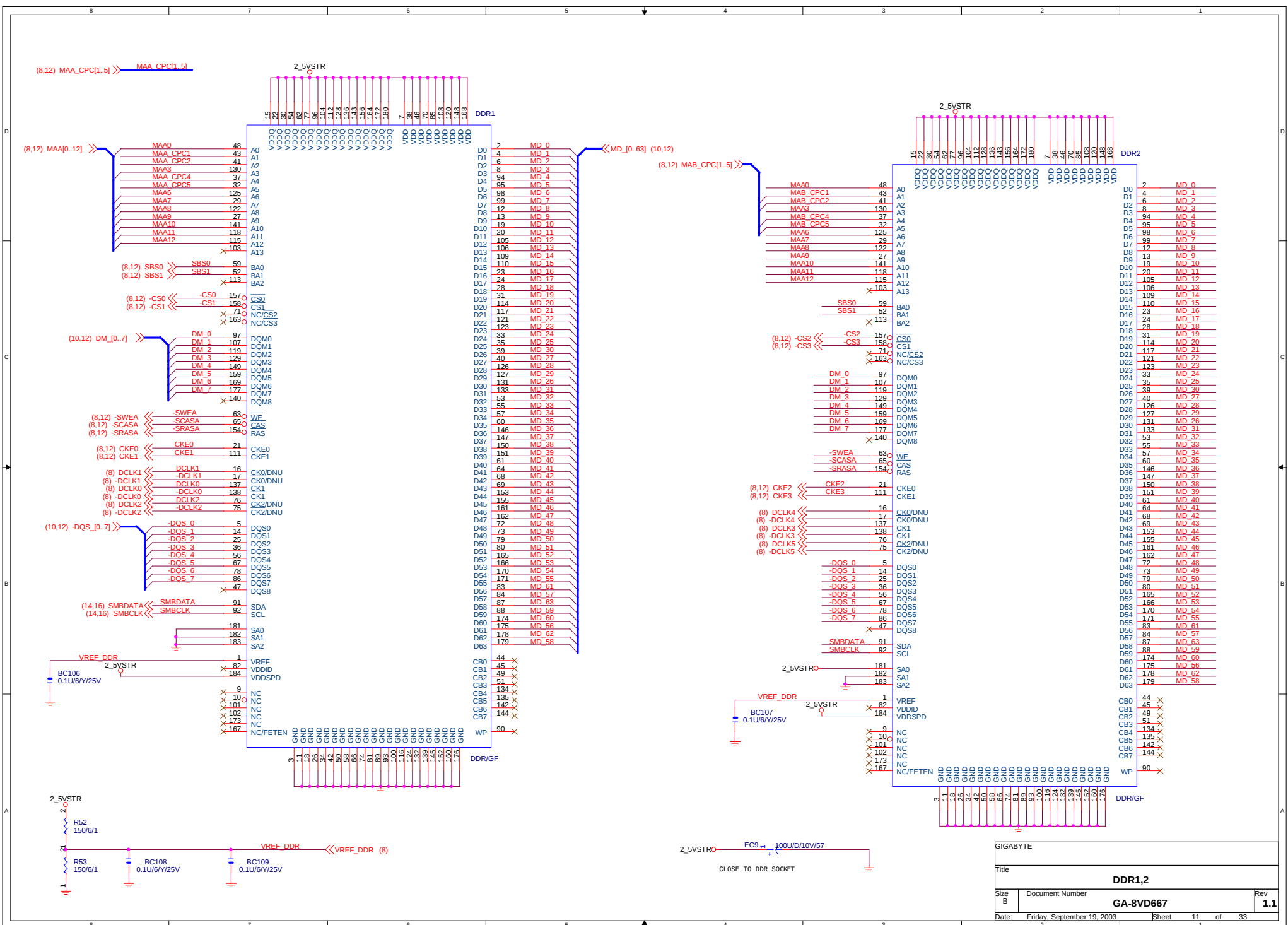


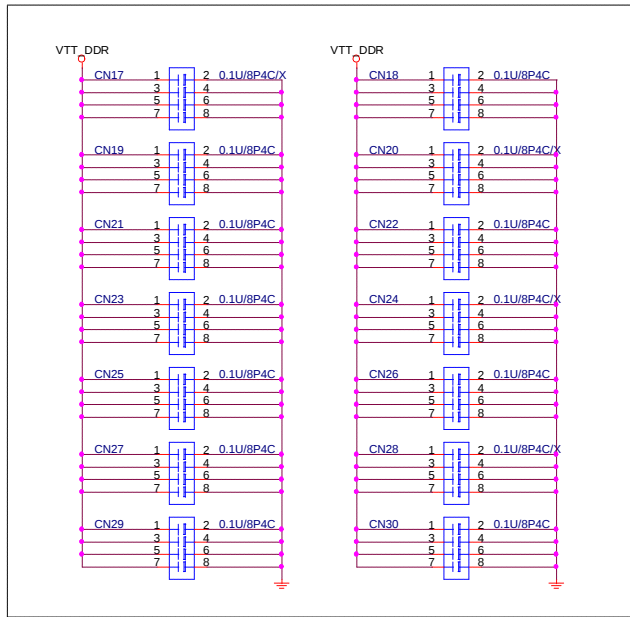
GIGABYTE			
Title			
P4 478C			
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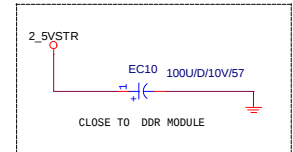
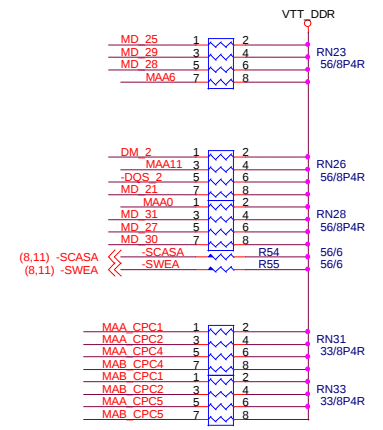
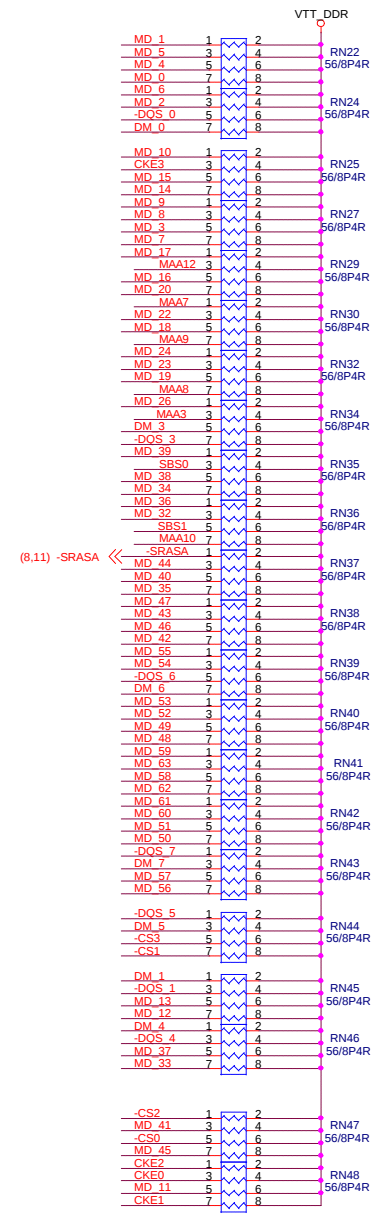
(11,12) -DQS_[0..7] <<————— <<-DQS[0..7] (8)

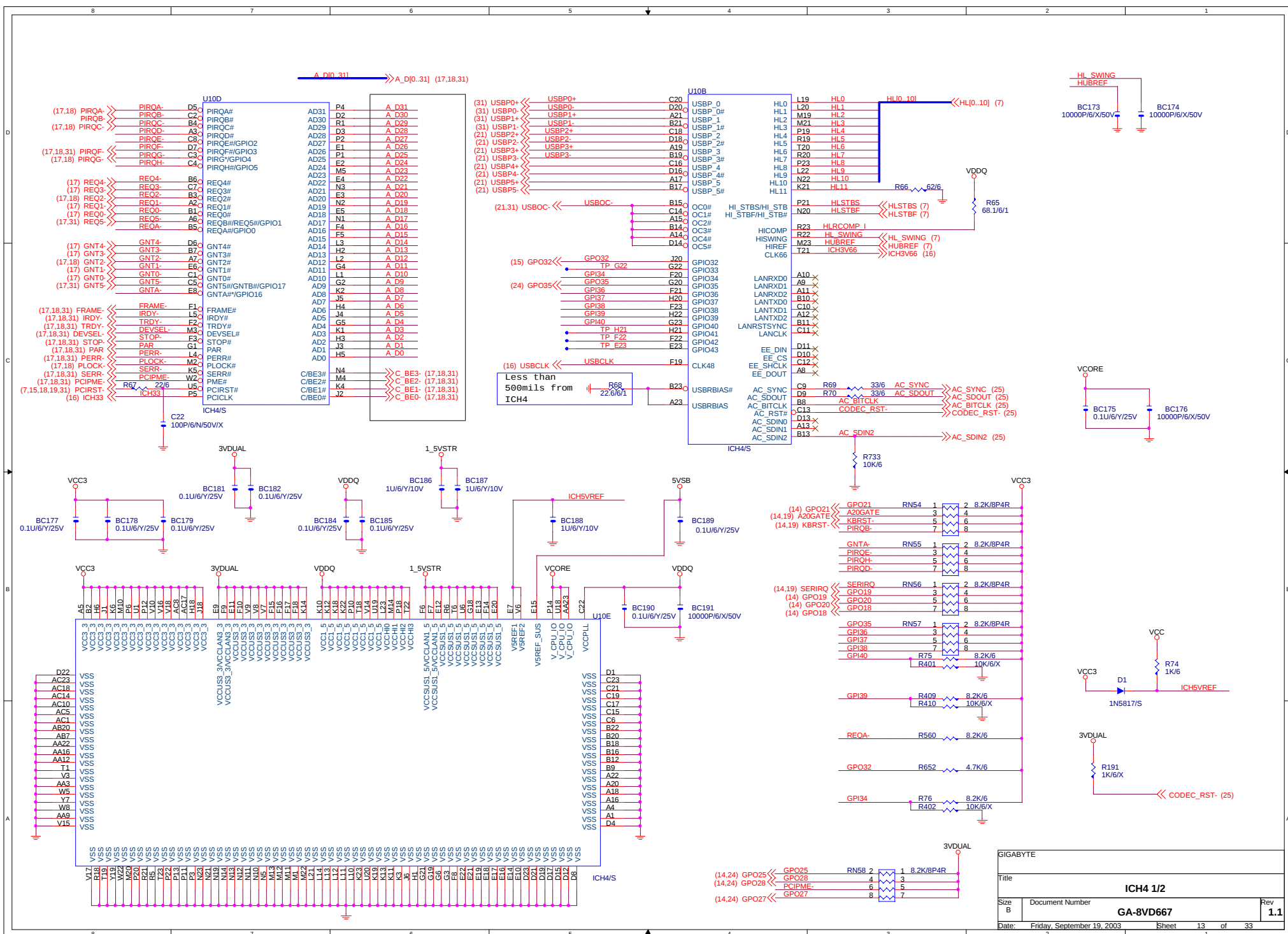


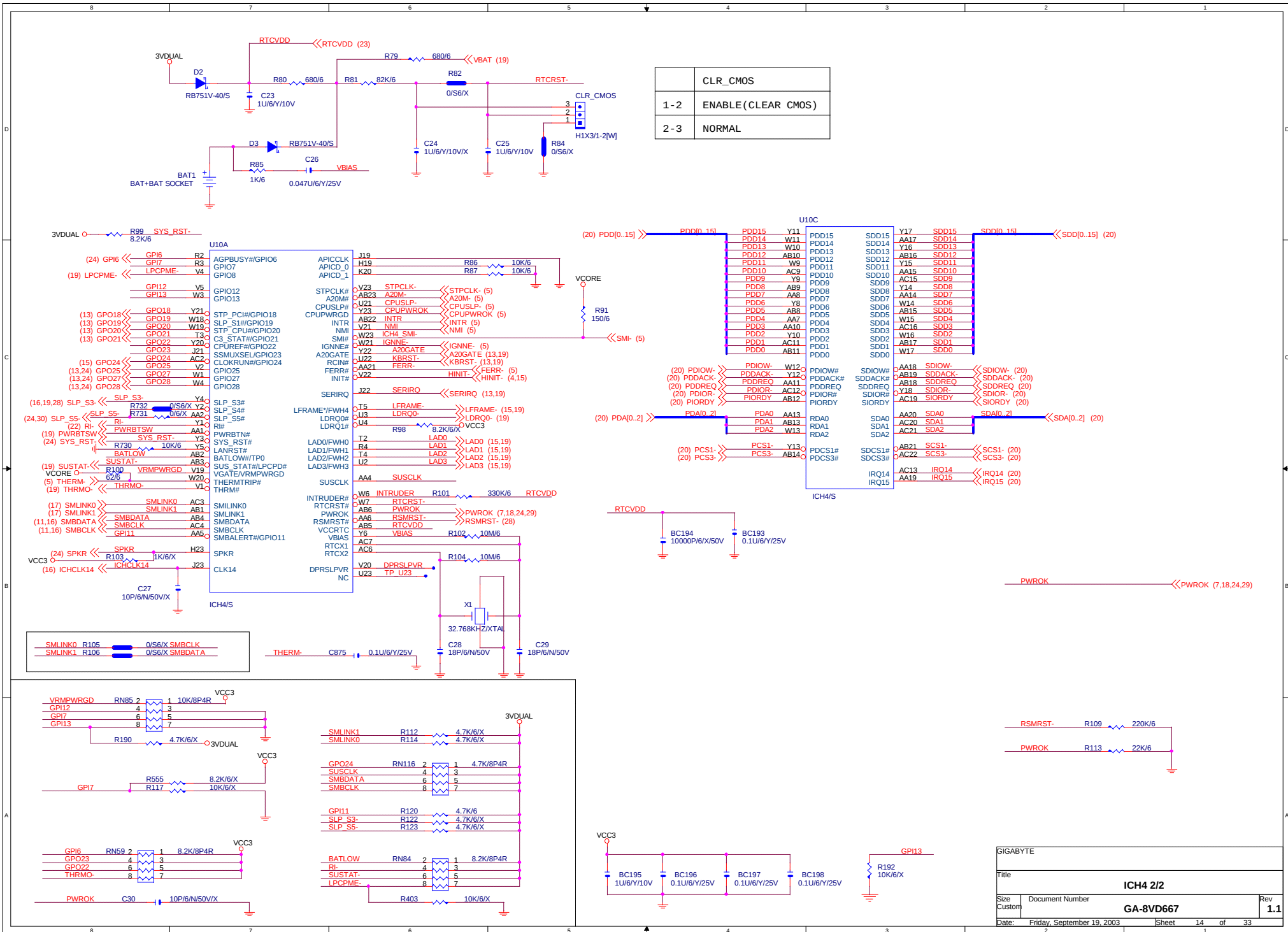


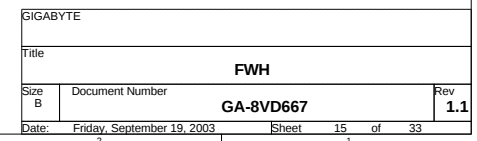
(10,11) MD_[0..63] << MD_[0..63]
 (10,11) DM_[0..7] << MD_[0..7]
 (10,11) -DQS_[0..7] << -DQS_[0..7]
 (8,11) MAA[0..12] << MAA[0..12]
 (8,11) -CS[0..3] << -CS[0..3]
 (8,11) CKE[0..3] << CKE[0..3]
 (8,11) SBS[0..1] << SBS[0..1]
 (8,11) MAA_CPC[1..5] << MAA_CPC[1..5]
 (8,11) MAB_CPC[1..5] << MAB_CPC[1..5]

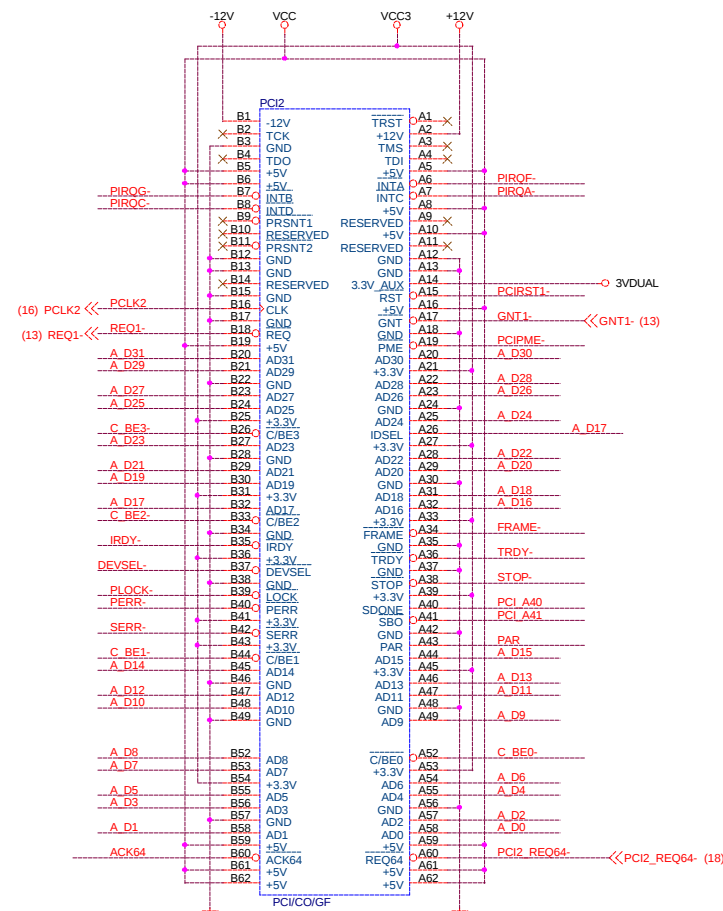
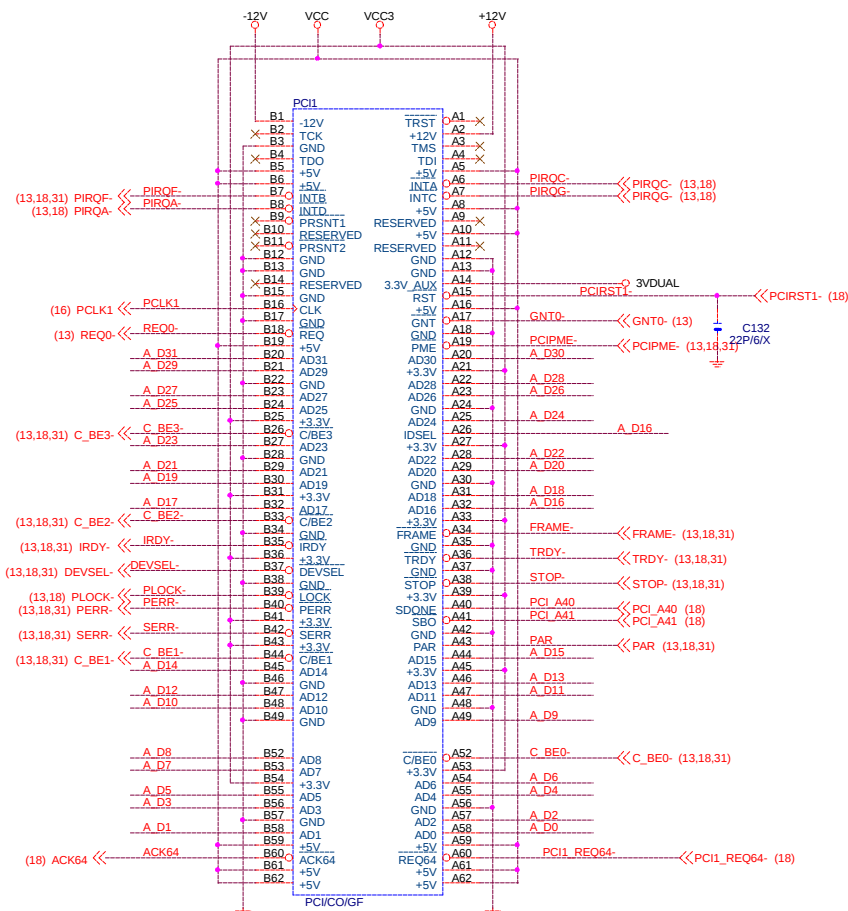
CLOSE TO DDR TERMINATOR(1 CAP. FOR 2 R-PACKS)











(13,18,31) A_D[0..31] << A_DIO_31

PCIRST1- (18)

C51 100P/6N/50V/X

(14) SMLINK0 << R172 0/6/X PCI A40
(14) SMLINK1 << R174 0/6/X PCI A41

(13,31) GNT5- << GNT5- 1 2 3 4 5 6 7 8
(13,18) GNT3- << GNT3- 1 2 3 4 5 6 7 8
(13,18) GNT2- << GNT2- 1 2 3 4 5 6 7 8
(13) GNT4- << GNT4- 1 2 3 4 5 6 7 8

(13,18) PIRQA- << PIRQA- 1 2 3 4 5 6 7 8
(13) GNT1- << GNT1- 1 2 3 4 5 6 7 8

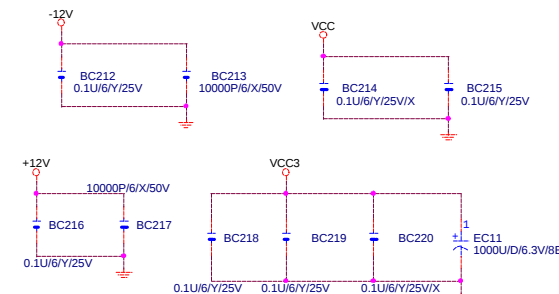
(13) REQ0- << REQ0- 1 2 3 4 5 6 7 8
(13) REQ1- << REQ1- 1 2 3 4 5 6 7 8
(13,18) PIRQC- << PIRQC- 1 2 3 4 5 6 7 8

(13) REQ3- << REQ3- 1 2 3 4 5 6 7 8
(13,31) REQ5- << REQ5- 1 2 3 4 5 6 7 8
(13) REQ4- << REQ4- 1 2 3 4 5 6 7 8
(13,18) REQ2- << REQ2- 1 2 3 4 5 6 7 8

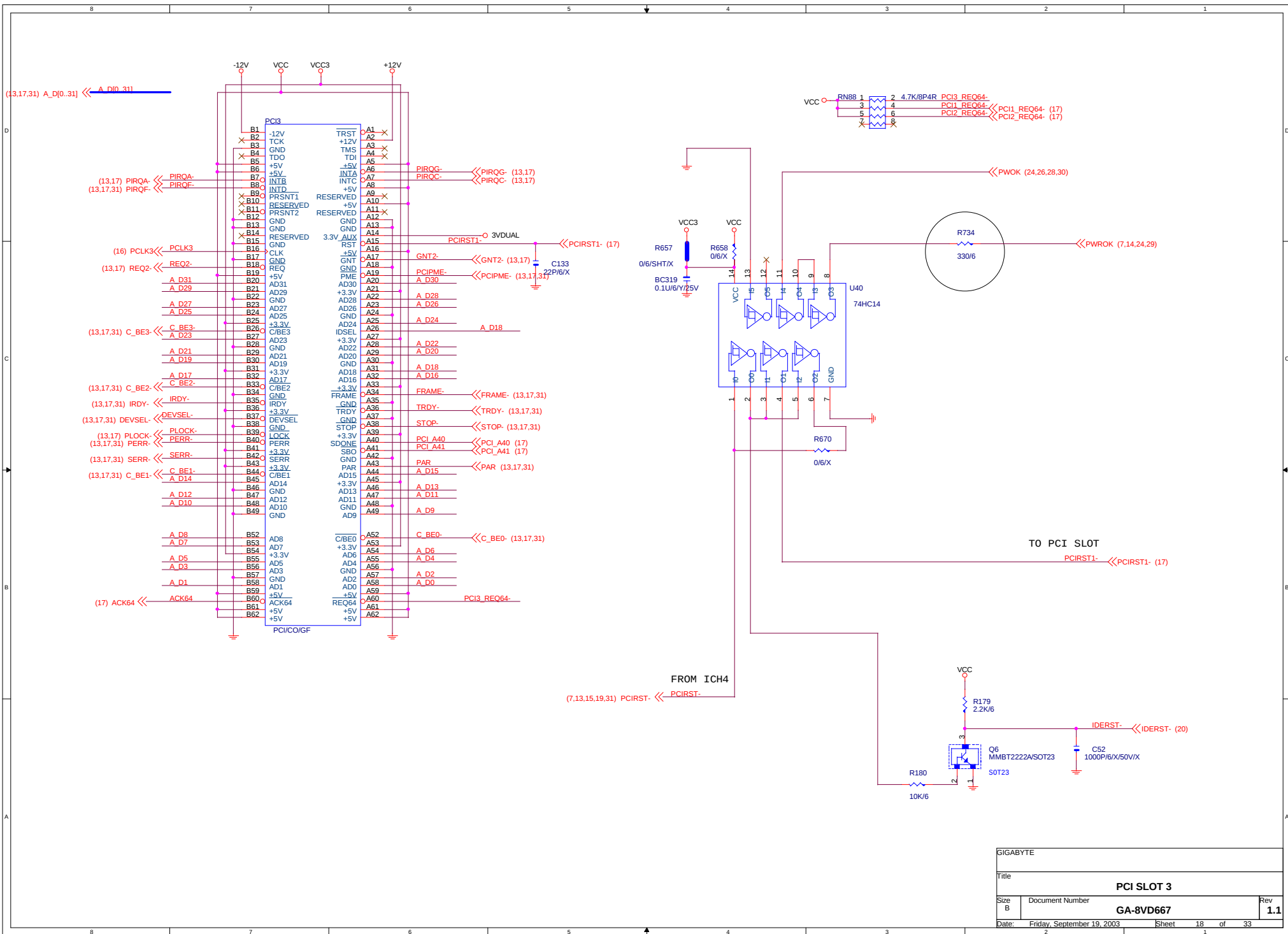
FRAME- << FRAME- 1 2 3 4 5 6 7 8
TRDY- << TRDY- 1 2 3 4 5 6 7 8
DEVSEL- << DEVSEL- 1 2 3 4 5 6 7 8

STOP- << STOP- 1 2 3 4 5 6 7 8
PLOCK- << PLOCK- 1 2 3 4 5 6 7 8
SERR- << SERR- 1 2 3 4 5 6 7 8

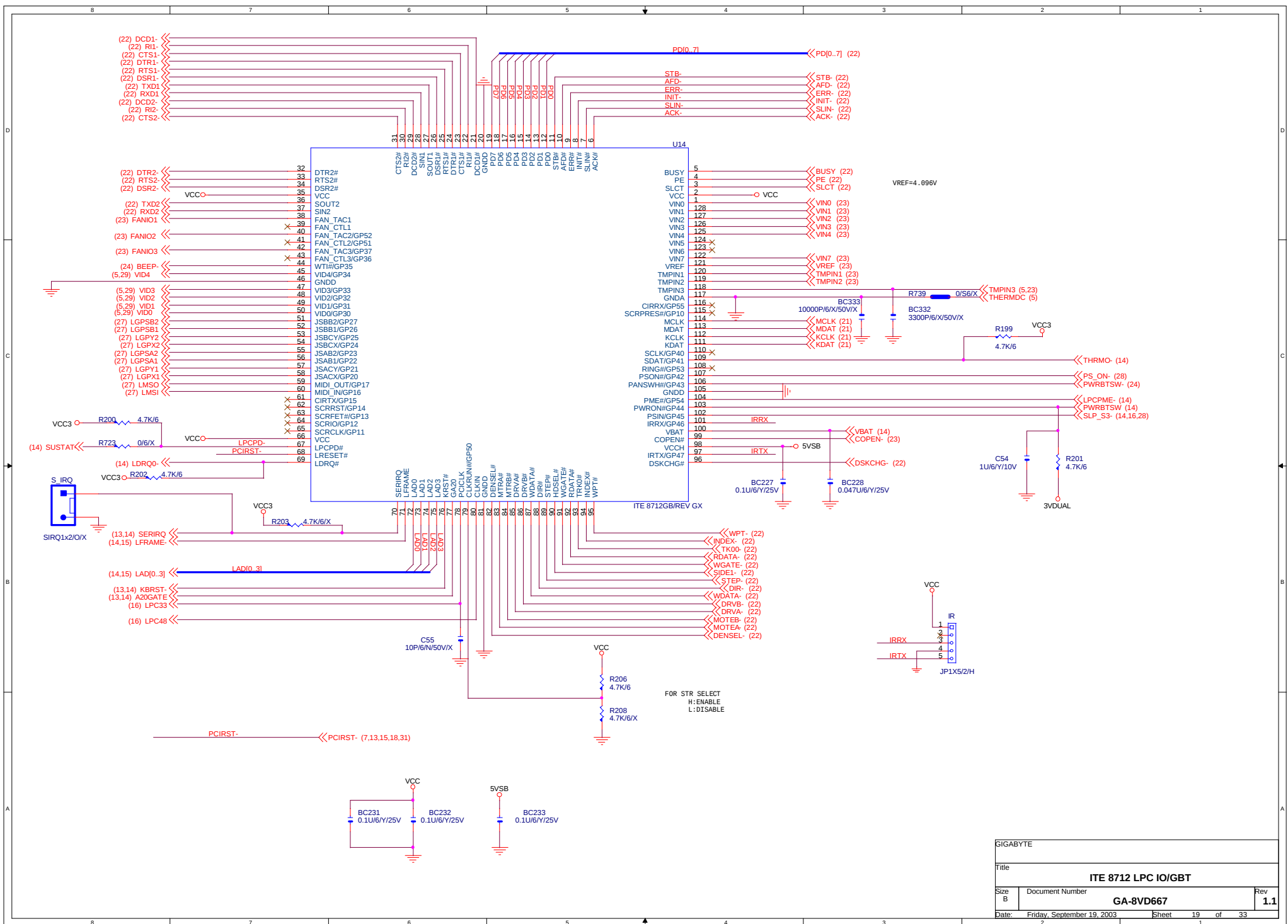
PAR << PAR 1 2 3 4 5 6 7 8
ACK64 << ACK64 1 2 3 4 5 6 7 8

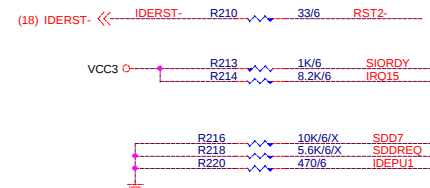
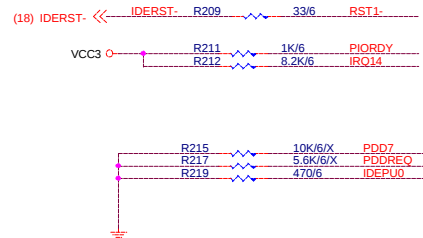
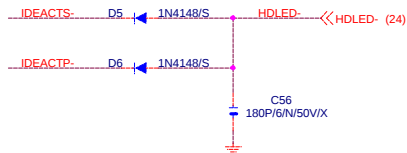


GIGABYTE			
Title			
PCI SLOT 1/2			
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		2	1

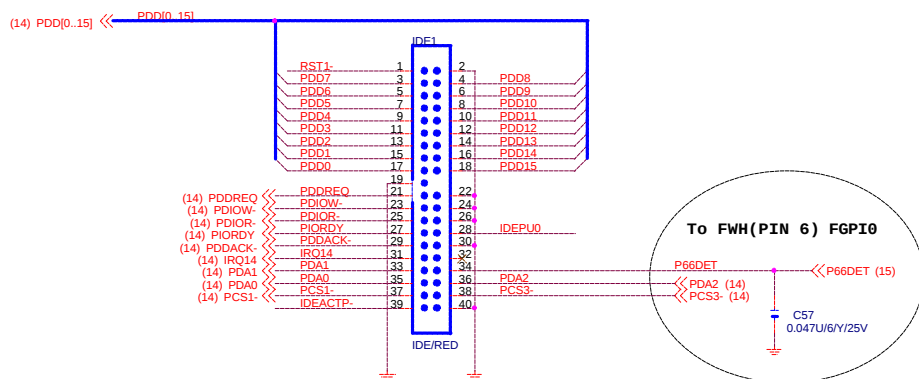


GIGABYTE			
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PCI SLOT 3			
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B	GA-8VD667	1.1	
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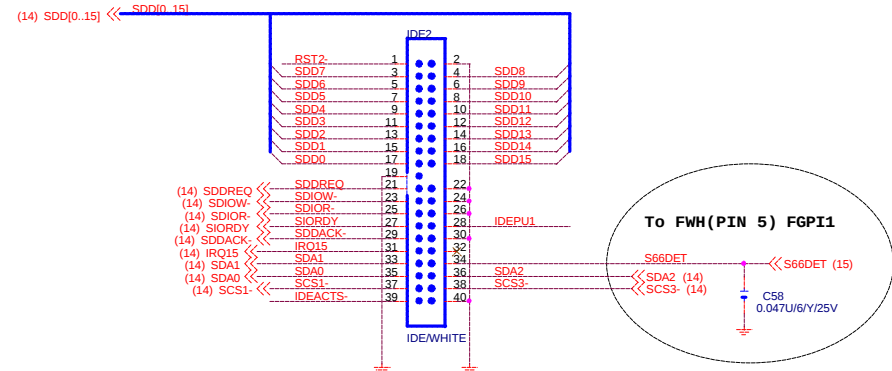


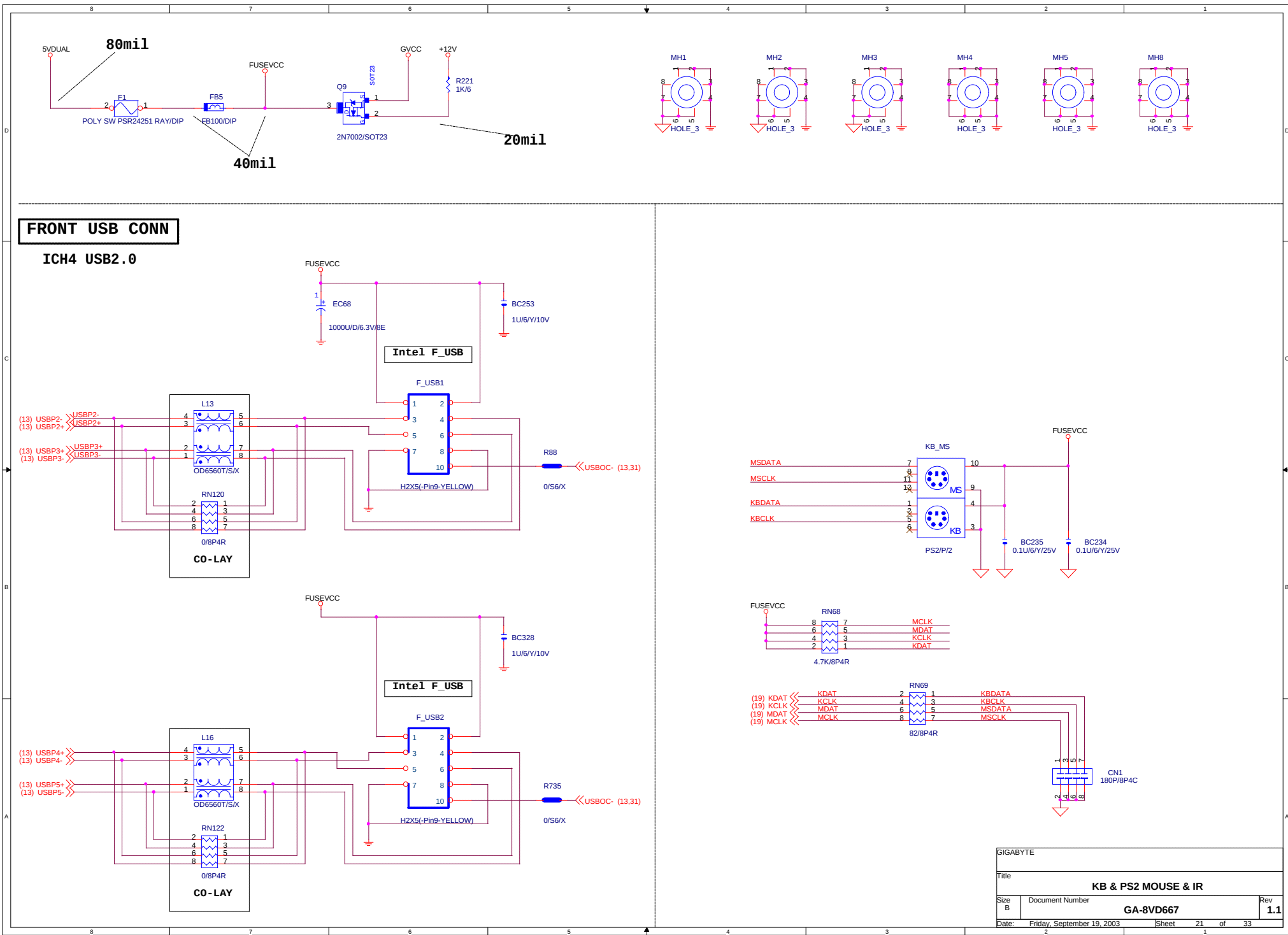


PRIMARY IDE CONNECTOR



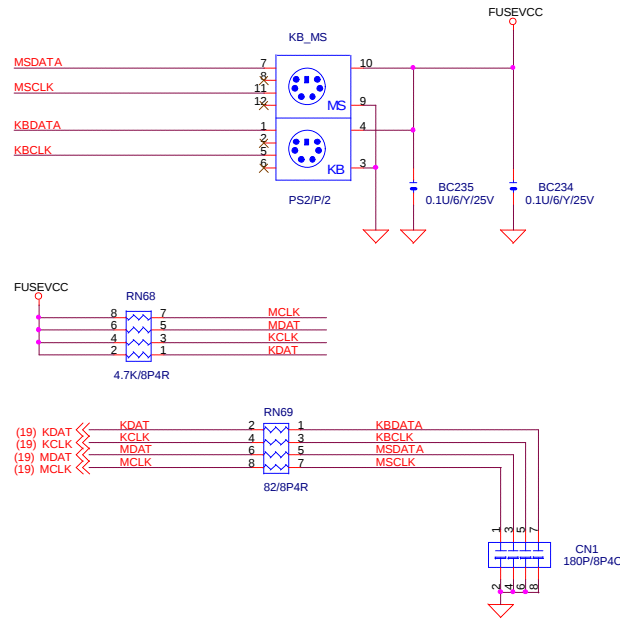
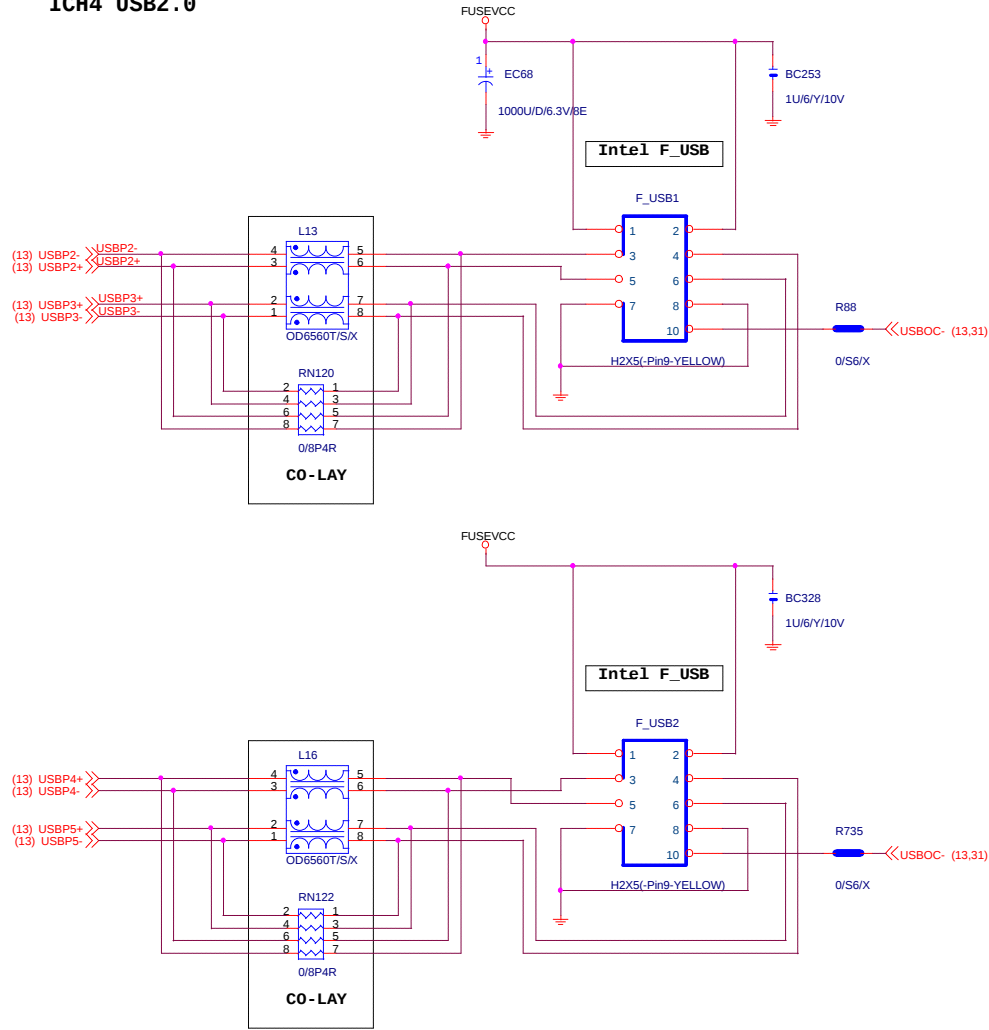
SECONDARY IDE CONNECTOR





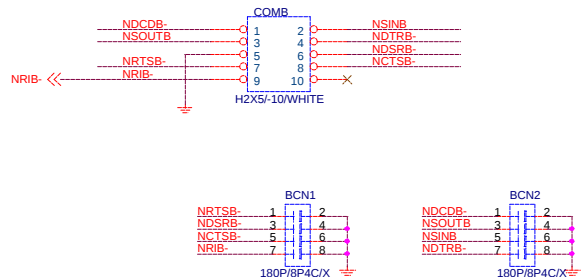
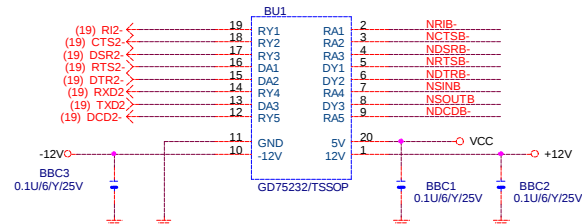
FRONT USB CONN

ICH4 USB2.0

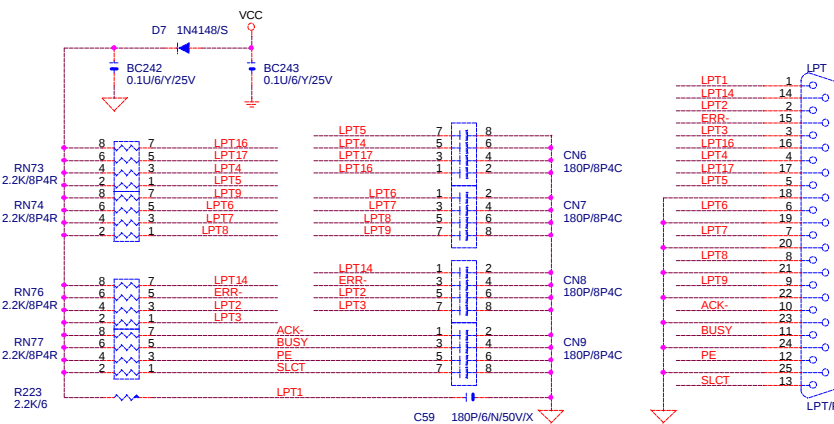
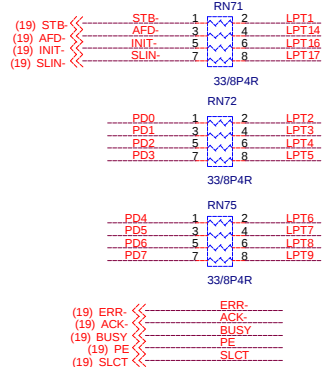
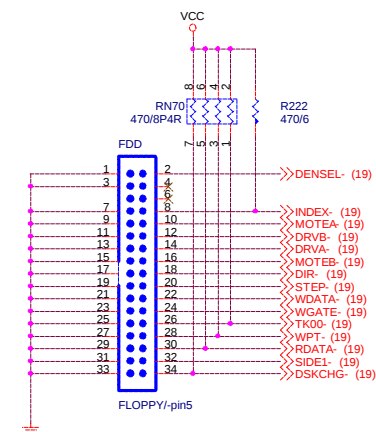


GIGABYTE		
Title		
KB & PS2 MOUSE & IR		
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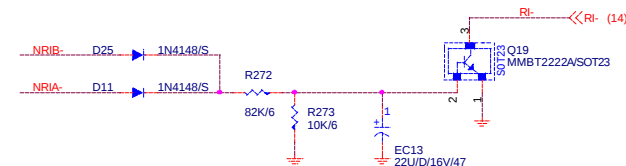
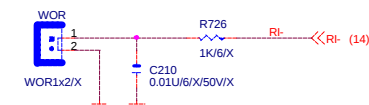
COMA



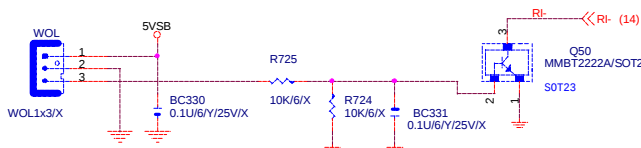
FLOPPY



WOR

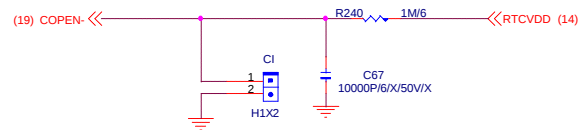
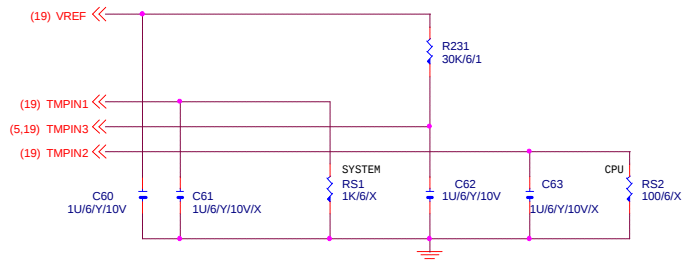


WOL

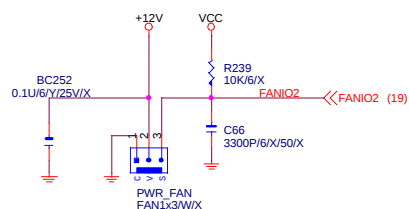
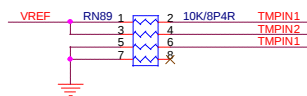


GIGABYTE			
Title			
COM & WOR & WOL & LPT PORT & FLOOPY			
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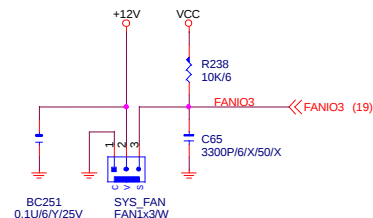
Hardware Monitor circuits



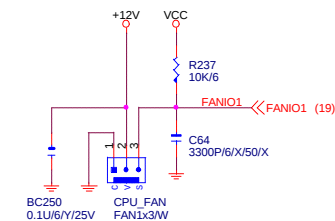
CASE OPEN



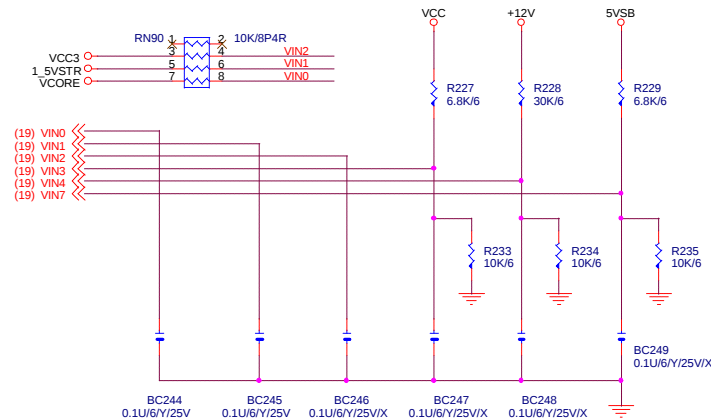
PWR_FAN

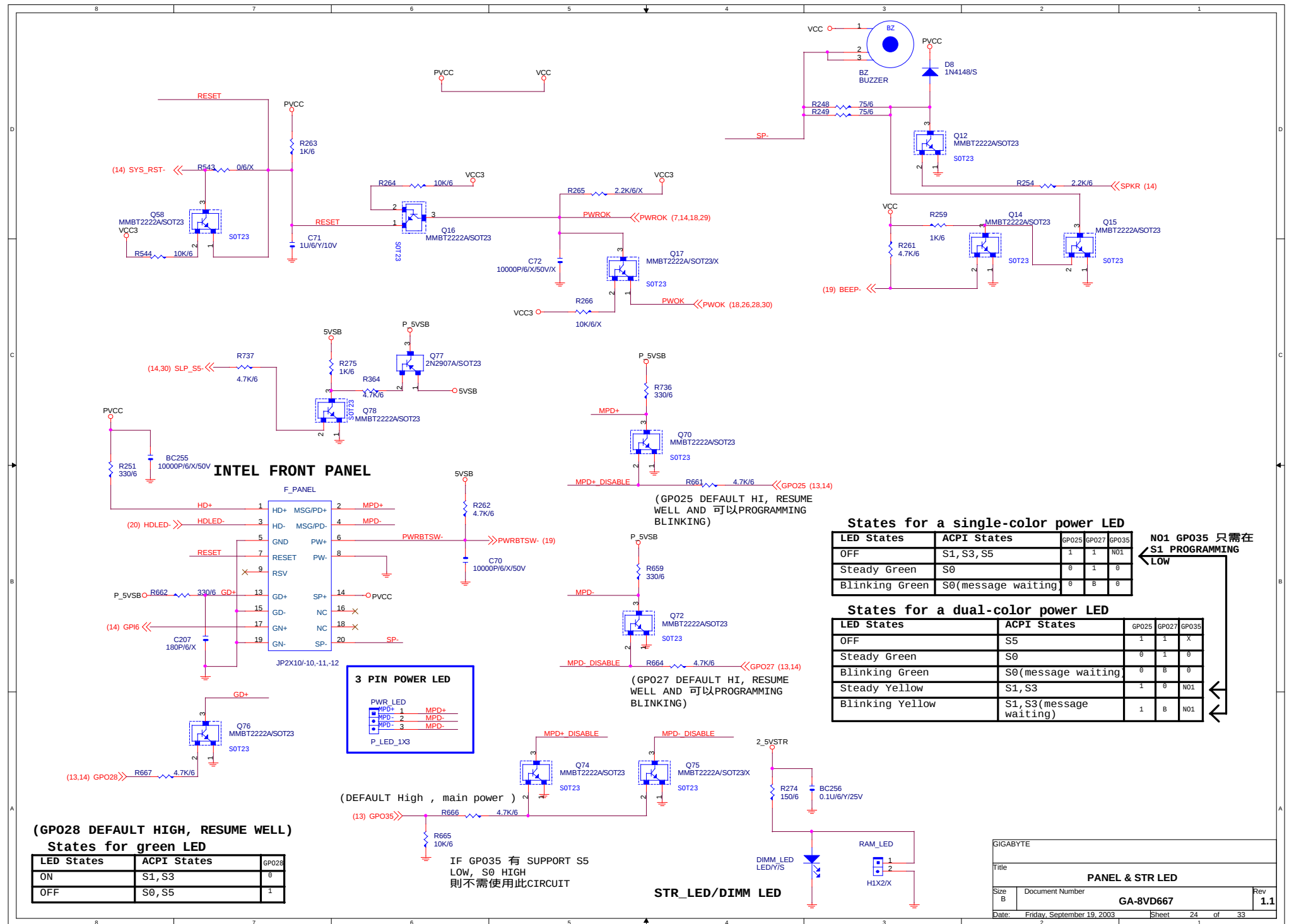


SYS_FAN

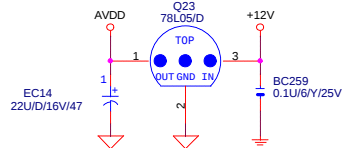


CPU_FAN





AVDD



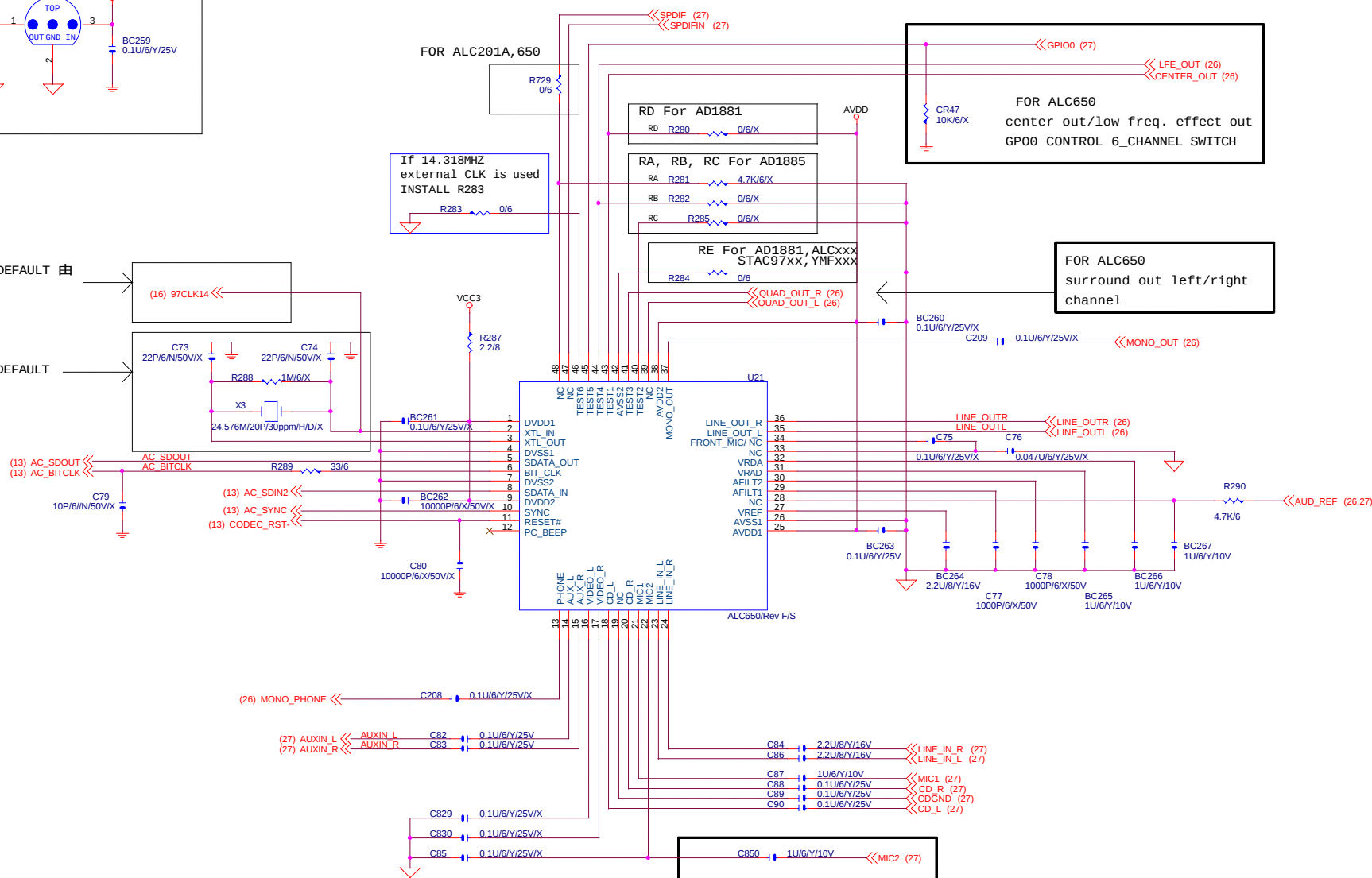
FOR ALC201A, 650

If 14.318MHZ external CLK is used
INSTALL R283

FOR 101 DEFAULT

FOR 650 DESIGN DEFAULT 由
CLOCK GEN 来

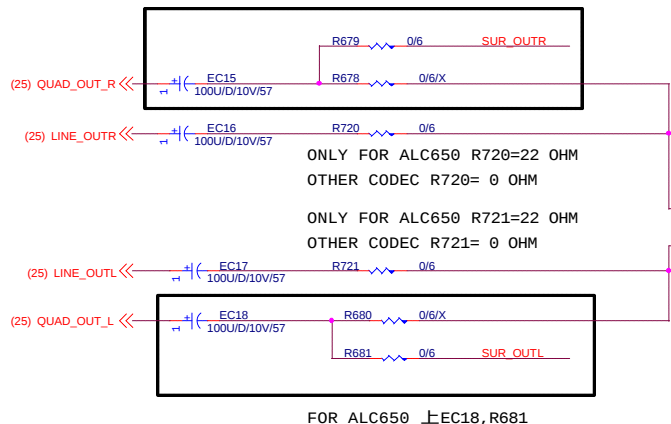
FOR 650 DESIGN DEFAULT
不上 CRYSTAL



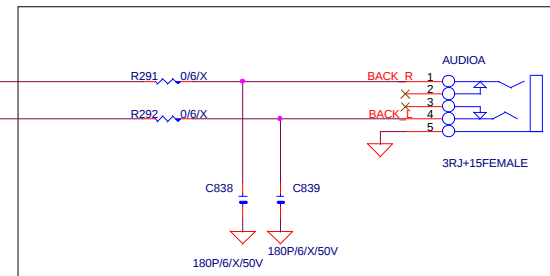
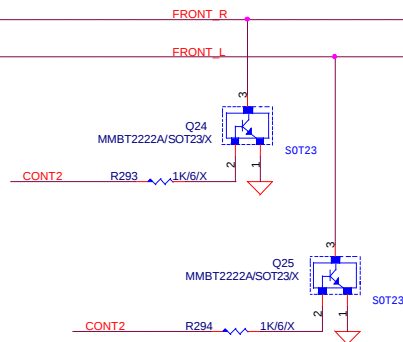
FOR ALC650 C850要上

GIGABYTE			
Title			
AC97 CODEC			
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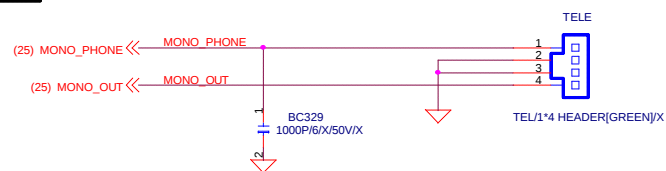
FOR ALC650 上EC15,R679



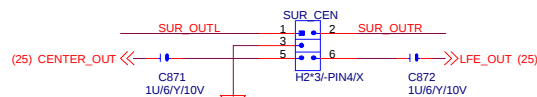
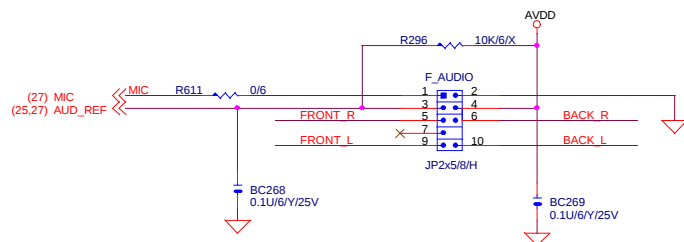
LINE-OUT



TELE



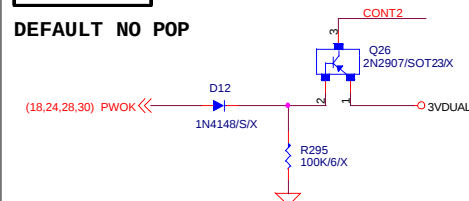
INTEL FRONT AUDIO



FOR SUPPORT 6 CHANNEL,
SURROUND OUT
SURR_CEN_LFE CENTER OUT, LOW
FREQUENCY
EFFECT OUT

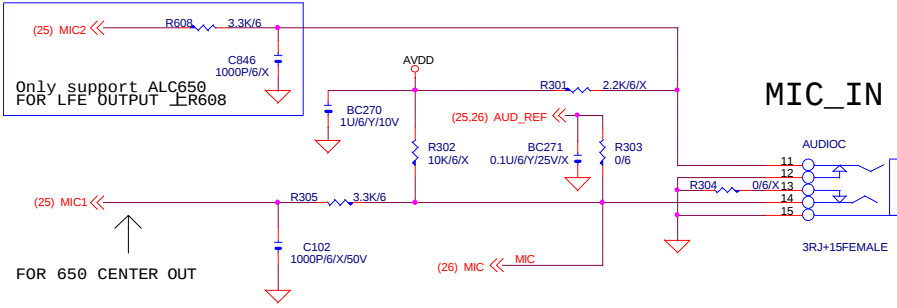
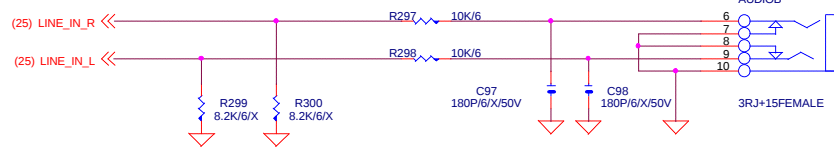
ANTI-POP

DEFAULT NO POP

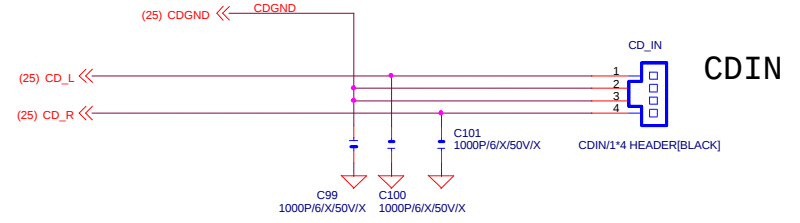


GIGABYTE		
Title		
LJACK LINE OUT		
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B	GA-8VD667	1.1
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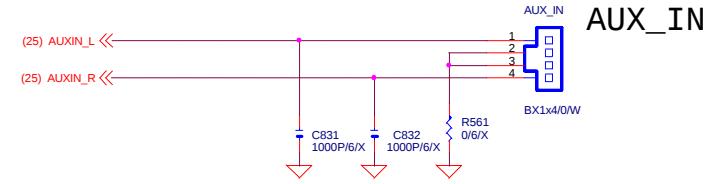
LINE-IN



MIC_IN



CDIN

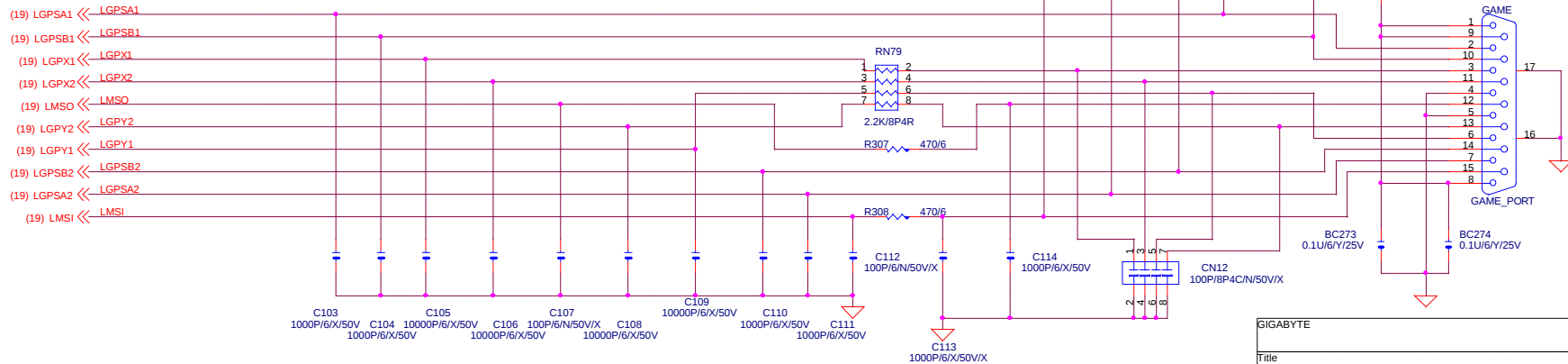


AUX_IN

SPDIF

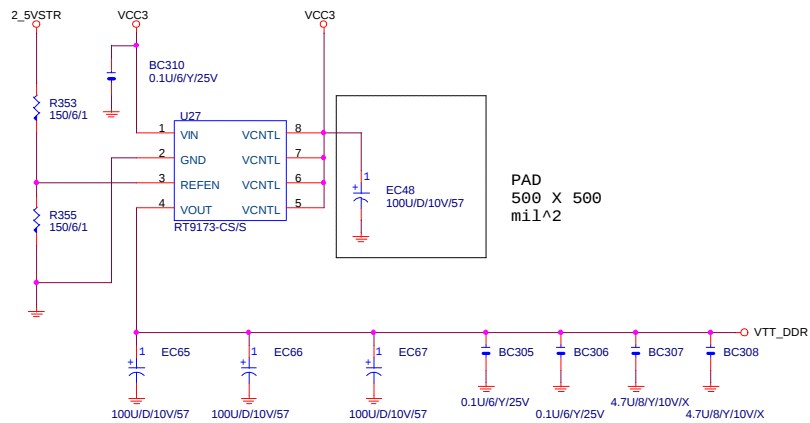


ITE GAME_PORT

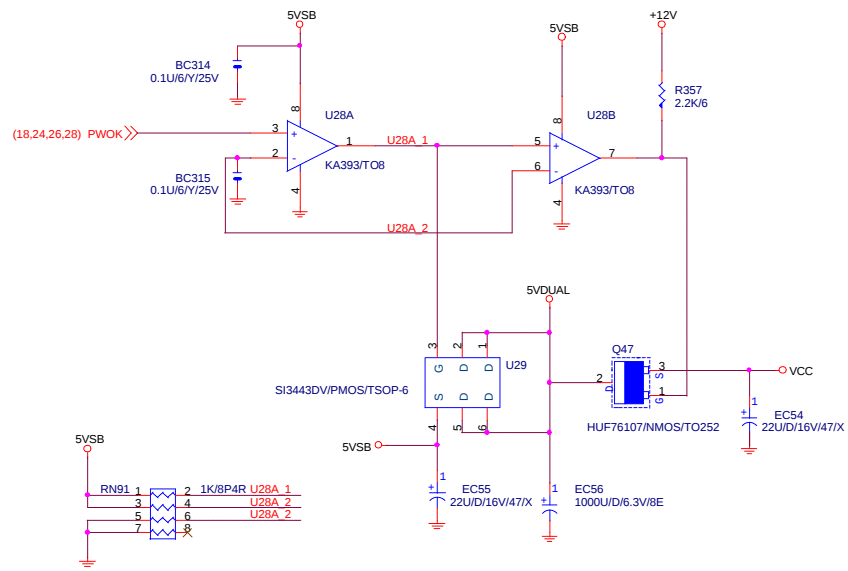


GIGABYTE		
Title		
PHONE JACK, GAME PORT		
Size	Document Number	Rev
B	GA-8VD667	1.1
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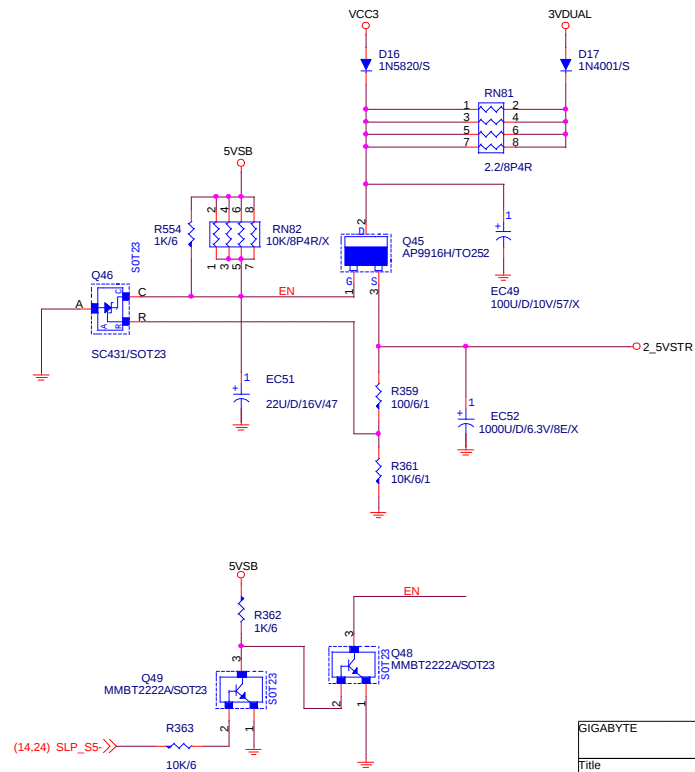
1.25V VTT_DDR LINEAR SOLUTION



VTT_DDR



5VDUAL CIRCUIT



2_5VSTR

GIGABYTE			
Title			
DDR POWER			
Size B	Document Number		Rev
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LAN RTL8101L (REALTEK)

Pinout Table:

Pin	Function
1	INTA#
2	RST#
3	CLK
4	GN#
5	REQ#
6	REQ#
7	A D30
8	A D29
9	A D28
10	A D27
11	A D26
12	A D25
13	A D24
14	VDD25
15	VDD25
16	VDD25
17	VDD25
18	VDD25
19	VDD25
20	VDD25
21	VDD25
22	VDD25
23	VDD25
24	VDD25
25	VDD25
26	VDD25
27	VDD25
28	VDD25
29	VDD25
30	VDD25
31	VDD25

8101L NOTE:

POWER DECOUPLING CAP.

3VDUAL

LBC1 0.1u/6/V/25V

LBC2 0.1u/6/V/25V

LBC3 0.1u/6/V/25V

LBC4 0.1u/6/V/25V

LBC5 0.1u/6/V/25V

LBC6 0.1u/6/V/25V

AVDD33

FB6 30/8/S

3VDUAL

LBC9 0.1u/6/V/25V

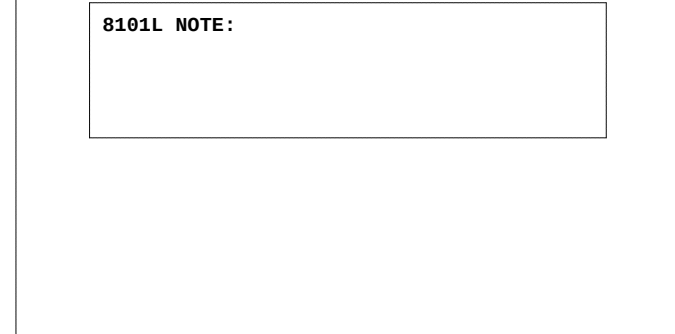
LBC10 0.1u/6/V/25V

LBC11 0.1u/6/V/25V

LBC12 0.1u/6/V/25V

[illegible]

8101L NOTE:



EC64 要靠近USB_PORT的FUSEVCC

FUSEVCC

1000uID/6.3V/8E

EC64

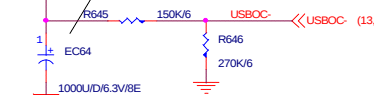
R645 150K/6

R646 270K/6

USBOC- (13,21)

USBOC+

FUSEVCC



Title				
LAN RTL8101L				
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GIGABYTE GA-8VD667 GPIO LIST

Revision 1.1

SHEET TITLE

GPI		
PIRQB-		PULL 8.2K TO VCC3
PIRQD-		PULL 8.2K TO VCC3
PIRQE-		PULL 8.2K TO VCC3
PIRQH-		PULL 8.2K TO VCC3
GPI6		PULL 8.2K TO VCC3 (GREEN_BUTTON)
GPI7		NOT IMPLEMENTED
GPI8		PULL 8.2K TO 3VDUAL, LPC PME.
GPI9	NA	NOT IMPLEMENTED
GPI10	NA	NOT IMPLEMENTED
GPI11		PULL 4.7K TO 3VDUAL (SMBALERT)
GPI12		PULL DOWN 10K.
GPI13		PULL DOWN 10K, CNR_PRIMARY
GPI14	NA	NOT IMPLEMENTED
GPI15	NA	NOT IMPLEMENTED

SHEET TITLE

GPO		
GP018		PULL 8.2K TO VCC3
GP019		PULL 8.2K TO VCC3
GP020		PULL 8.2K TO VCC3
GP021		PULL 8.2K TO VCC3
GP022		PULL 8.2K TO VCC3
GP023		PULL 8.2K TO VCC3
GP024		PULL 1K TO 3VDUAL (TOP BLOCK)
GP025		PULL 4.7K TO 3VDUAL, BIOS WRITE PROTECT.
GP026		NOT IMPLEMENTED
GP027		PULL 8.2K TO 3VDUAL, LAN 100/10 DETECT.
GP028		PULL 8.2K TO 3VDUAL

Revision 1.1

PCI DEVICE	IDSEL	INT	CLOCK	REQ	GNT	
PCI SLOT1	16	C, F, G, A	PCLK1	REQ0 -	GNT0 -	
PCI SLOT2	17	F, G, A, C	PCLK2	REQ1 -	GNT1 -	
PCI SLOT3	18	G, A, C, F	PCLK3	REQ2 -	GNT2 -	
	19					
	20					
	21					
	26					
	28					
	23					
	NA					